

Appln. of: ROBERTSON, Niel et al.
Serial No.: 09/603,174
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ALLOWED CLAIMS ("CLEAN COPY")

1. A method for Internet performance monitoring and analysis comprising, by a data collection agent (DCA), a DCA being a computer operating on the Internet and configured with software that is controlled remotely from another location on the Internet:

responsive to a request from another location, said request including an indication of a web page, collecting web page object-level data with said DCA;
measuring access to web page objects in the web page; and

transmitting measured information about the access to the web page back to the location that made the request.

2. The method as recited in claim 1 wherein the measuring further comprises capturing non-speed based information including errors during download, source of content by IP address, and type of content that an object represents.

3. (Canceled)

4. The method as recited in claim 1 wherein the measuring utilizes an HTTP protocol to interact with a web server.

5. The method as recited in claim 1 further comprising requesting data be transferred from one source to another.

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6. The method as recited in claim 5 wherein the requesting occurs automatically.

7. The method as recited in claim 1 wherein the measuring further comprises parsing and recognizing other objects referenced in a content returned that also need to be retrieved.

8. The method as recited in claim 7 further comprising retrieving the other objects referenced in the content.

9. A system for performance monitoring and analysis through a computer network comprising:

(A) at least one data collection agent (DCA) connected to said computer network and configured with software that is controlled remotely from another location on the computer network and under the control of software to:

(a1) in response to a request from the other location, collect object-level data relating to a web page,

(a2) measure access parameters including performance metrics for objects of the web page while the collection of the object-level data occurs; and

(a3) transmit measurement data back to the remote location that requested the download; and

(B) a user interface component to receive measurement data from said DCA.

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10. A system for performance monitoring and analysis of web pages from a server through a global computer network comprising:

a plurality of data collection agents (DCAs) located at distributed points throughout said global computer network; each of the DCAs configured with software that is controlled remotely from another location on the global computer network, and each of said DCAs being under the control of software to, responsive to requests from the other location, collect object level data and to measure access parameters while the collection of the object-level data occurs; and

a monitoring component at the other location to receive measurement data from said agents.

11. The system for performance monitoring and analysis through a global computer network as recited in claim 10 further comprising a mechanism constructed and adapted to determine the time for a customer to view a Web page.

12. The system for performance monitoring and analysis through a global computer network as recited in claim 10 further comprising a mechanism constructed and adapted to measure variations in a website's performance by regional location or the network connectivity of an end-user.

13. The system for performance monitoring and analysis through a global computer network as recited in claim 10 further comprising a mechanism constructed and adapted to determine a customer's experience by time of day and day of the week.

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14. The system for performance monitoring and analysis through a global computer network as recited in claim 10, wherein the global computer network is the Internet, the system further comprising a mechanism constructed and adapted to determine the origination of Internet-related performance problems.

15. The system for performance monitoring and analysis through a global computer network as recited in claim 10 further comprising a mechanism constructed and adapted to compare download performance compared to industry standards or competitive websites.

16. The system for performance monitoring and analysis through a global computer network as recited in claim 10 further comprising a mechanism constructed and adapted to monitor download performance changes since the last hardware/software/design in investment to the website.

17. The system for performance monitoring and analysis through a global computer network as recited in claim 10 further comprising a mechanism constructed and adapted to monitor access refusals due to traffic overload.

18. The system for performance monitoring and analysis through a global computer network as recited in claim 10 further comprising a mechanism constructed and adapted to monitor a rate at which incomplete pages are served.

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19. The system for performance monitoring and analysis through a global computer network as recited in claim 10 further comprising a mechanism constructed and adapted to monitor performance over time to obtain performance trends as to whether website access is getting better or worse over time.

20. The system for performance monitoring and analysis through a global computer network as recited in claim 10 further comprising a mechanism constructed and adapted to monitor performance in relation to performance thresholds including corporate goals or acceptable levels.

21. The system for performance monitoring and analysis through a global computer network as recited in claim 10 further comprising a mechanism constructed and adapted to determine website performance improvements.

22. The system for performance monitoring and analysis through a global computer network as recited in claim 10 further comprising a mechanism constructed and adapted to determine vendor weaknesses contributing to poor website performance.

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